SEQUENCE LISTING

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<140> US 10/735,916
<141> 2003-12-16

<150> FR 03/08 538
<151> 2003-07-11

<150> PCT/FR 03/00 178
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<150> FR 02/00 653
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Ser Asp Val Leu Met Thr Gln Ile Pro Leu Ser Leu Pro Val Ser Leu
10 15 20 25

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                30                  35                  40

agt aat gga aac acc tat tta caa tgg tac ctg cag aaa cca ggt cag   198
Ser Asn Gly Asn Thr Tyr Leu Gln Trp Tyr Leu Gln Lys Pro Gly Gln
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tct cca aag ctc ctg atc tac aaa gtt tcc aac cga ctt tat ggg gtc   246
Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Tyr Gly Val
        60                  65                  70

cca gac agg ttc agt ggc agt gga tca ggg aca gat ttc aca ctc aag   294
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys
    75                  80                  85

atc agc agc gtg gag gct gag gat ctg gga gtt tat tac tgc ttt caa   342
Ile Ser Ser Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln
90                  95                  100                 105

ggt tca cat gtt ccg tgg acg ttc ggt gga ggc acc aag ctg gaa atc   390
Gly Ser His Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
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Cys Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr Leu
        35                  40                  45

Gln Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr
    50                  55                  60

Lys Val Ser Asn Arg Leu Tyr Gly Val Pro Asp Arg Phe Ser Gly Ser
65                  70                  75                  80

Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Ser Val Glu Ala Glu
                85                  90                  95

Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly Ser His Val Pro Trp Thr
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Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
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Ser Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser
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Gln Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Gly
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Gly Tyr Leu Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Glu
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Trp Met Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro Ser
60 65 70

ctc aaa gat cga atc tcc atc act cgt gac aca tct aag aac cag ttt 291
Leu Lys Asp Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe
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Phe Leu Lys Leu Asn Ser Val Thr Asn Glu Asp Thr Ala Thr Tyr Tyr
90 95 100 105

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Cys Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly Thr
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Arg Gln Phe Pro Gly Asn Lys Leu Glu Trp Met Gly Tyr Ile Ser Tyr
50 55 60

Asp Gly Thr Asn Asn Tyr Lys Pro Ser Leu Lys Asp Arg Ile Ser Ile
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Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe Leu Lys Leu Asn Ser Val
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Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Tyr Gly Val Pro
    50                  55                  60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80

Ser Ser Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95

Ser His Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110
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Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95

Ser His Val Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Asp Ile Lys
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Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
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Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
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Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65                  70                  75                  80

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Ser His Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
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Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
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Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
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Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65                  70                  75                  80

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             20                  25                  30

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         35                  40                  45

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             20                  25                  30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
         35                  40                  45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
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Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
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35 40 45

Pro Gln Leu Leu Ile Tyr Leu Val Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

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100 105 110

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20 25 30

Asn Gly Asn Thr Tyr Leu Gln Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Tyr Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

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100 105 110

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15 20 25

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Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
30 35 40

agg tct agt cag agc att gta cat agt aat gga aac acc tat ttg caa 195
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr Leu Gln
45 50 55

tgg tac ctg cag aag cca ggg cag tct cca cag ctc ctg atc tat aaa 243
Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Lys
60 65 70

gtt tct aat cgg ctt tat ggg gtc cct gac agg ttc agt ggc agt gga 291
Val Ser Asn Arg Leu Tyr Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
75 80 85 90

tca ggc aca gat ttt aca ctg aaa atc agc aga gtg gag gct gag gat 339
Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
95 100 105

gtt ggg gtt tat tac tgc ttt caa ggt tca cat gtt ccg tgg acg ttc 387
Val Gly Val Tyr Tyr Cys Phe Gln Gly Ser His Val Pro Trp Thr Phe
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125 130

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20 25 30

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35 40 45

Val His Ser Asn Gly Asn Thr Tyr Leu Gln Trp Tyr Leu Gln Lys Pro
50 55 60

Gly Gln Ser Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Tyr
65 70 75 80

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
85 90 95

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
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115 120 125

Glu Ile Lys
130

<210> 64
<211> 433
<212> DNA
<213> Homo sapiens

<400> 64
cagtcttgcg cacggcggtg gtacttcaac ggacaatccg acaaccacga ctacaagacc 60
aaaggacgaa ggtcgtcact acaacactac tgagtcagag gtgagaggga cgggcagtgg 120
ggacctctcg gccggaggta gaggacgtcc agatcagtct cgtaacatgt atcattacct 180
ttgtggataa acgttaccat ggacgtcttc ggtcccgtca gaggtgtcga ggactagata 240
tttcaaagat tagccgaaat accccaggga ctgtccaagt caccgtcacc tagtccgtgt 300
ctaaaatgtg acttttagtc gtctcacctc cgactcctac aaccccaaat aatgacgaaa 360
gttccaagtg tacaaggcac ctgcaagccg gttccctggt tccaccttta gtttgcactc 420
acctaggaga cgc 433

<210> 65
<211> 112
<212> PRT
<213> Homo sapiens

<400> 65
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30

Asn Gly Asn Thr Tyr Leu Gln Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Tyr Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 66
<211> 433

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (22)..(414)

<400> 66
```
gtcagaacgc gtgccgccac c atg aag ttg cct gtt agg ctg ttg gtg ctg   51
                        Met Lys Leu Pro Val Arg Leu Leu Val Leu
                          1               5                  10

atg ttc tgg ttt cct gct tcc agc agt gat att gtg atg act cag tct   99
Met Phe Trp Phe Pro Ala Ser Ser Ser Asp Ile Val Met Thr Gln Ser
                 15                  20                  25

cca ctc tcc ctg ccc gtc acc cct gga gag ccg gcc tcc atc tcc tgc   147
Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
             30                  35                  40

agg tct agt cag agc att gta cat agt aat gga aac acc tat ttg caa   195
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr Leu Gln
         45                  50                  55

tgg tac ctg cag aag cca ggg cag tct cca cag ctc ctg atc tat aaa   243
Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Lys
     60                  65                  70

gtt tct aat cgg ctt tat ggg gtc cct gac agg ttc agt ggc agt gga   291
Val Ser Asn Arg Leu Tyr Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 75                  80                  85                  90

tca ggc aca gat ttt aca ctg aaa atc agc aga gtg gag gct gag gat   339
Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
                 95                 100                 105

gtt ggg gtt tat tac tgc ttt caa ggt tca cat gtt ccg tgg acg ttc   387
Val Gly Val Tyr Tyr Cys Phe Gln Gly Ser His Val Pro Trp Thr Phe
            110                 115                 120

ggc caa ggg acc aag gtg gaa atc aaa cgt gagtggatcc tctgcg         433
Gly Gln Gly Thr Lys Val Glu Ile Lys
        125                 130
```

<210> 67
<211> 131
<212> PRT
<213> Homo sapiens

<400> 67
```
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Phe Pro Ala
  1               5                  10                  15

Ser Ser Ser Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val
             20                  25                  30

Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
         35                  40                  45
```

```
Val His Ser Asn Gly Asn Thr Tyr Leu Gln Trp Tyr Leu Gln Lys Pro
     50                  55                  60

Gly Gln Ser Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Tyr
 65                  70                  75                  80

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85                  90                  95

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
            100                 105                 110

Phe Gln Gly Ser His Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val
        115                 120                 125

Glu Ile Lys
    130
```

<210> 68
<211> 433
<212> DNA
<213> Homo sapiens

<400> 68
cagtcttgcg cacggcggtg gtacttcaac ggacaatccg acaaccacga ctacaagacc 60
aaaggacgaa ggtcgtcact acaacactac tgagtcagag gtgagaggga cgggcagtgg 120
ggacctctcg gccggaggta gaggacgtcc agatcagtct cgtaacatgt atcattacct 180
ttgtggataa acgttaccat ggacgtcttc ggtcccgtca gaggtgtcga ggactagata 240
tttcaaagat tagccgaaat accccaggga ctgtccaagt caccgtcacc tagtccgtgt 300
ctaaaatgtg acttttagtc gtctcacctc cgactcctac aaccccaaat aatgacgaaa 360
gttccaagtg tacaaggcac ctgcaagccg gttccctggt tccaccttta gtttgcactc 420
acctaggaga cgc 433

<210> 69
<211> 117
<212> PRT
<213> Mus musculus

<400> 69
```
Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
  1               5                  10                  15

Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Gly Gly
             20                  25                  30

Tyr Leu Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Glu Trp
         35                  40                  45

Met Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro Ser Leu
     50                  55                  60

Lys Asp Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe
 65                  70                  75                  80

Leu Lys Leu Asn Ser Val Thr Asn Glu Asp Thr Ala Thr Tyr Tyr Cys
                85                  90                  95
```

```
Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly Thr Thr
            100                 105                 110

Leu Thr Val Ser Ser
        115
```

<210> 70
<211> 118
<212> PRT
<213> Mus musculus

<400> 70

```
Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
  1               5                  10                  15

Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Ser Gly
            20                  25                  30

Tyr Tyr Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Glu Trp
        35                  40                  45

Met Gly Tyr Ile Asn Tyr Asp Gly Asn Asn Asn Tyr Asn Pro Ser Leu
    50                  55                  60

Lys Asn Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe
65                  70                  75                  80

Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr Tyr Cys
                85                  90                  95

Ala Arg Glu Gly Tyr Gly Tyr Phe Phe Asp Tyr Trp Gly Gln Gly Thr
            100                 105                 110

Thr Leu Thr Val Ser Ser
        115
```

<210> 71
<211> 118
<212> PRT
<213> Mus musculus

<400> 71

```
Glu Val Gln Leu Gln Glu Ser Gly Pro Ser Leu Val Lys Pro Ser Gln
  1               5                  10                  15

Thr Leu Ser Leu Thr Cys Ser Val Thr Gly Asp Ser Ile Thr Ser Gly
            20                  25                  30

Tyr Trp Asn Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Glu Trp
        35                  40                  45

Met Gly Tyr Ile Ser Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
    50                  55                  60

Lys Ser Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Tyr Phe
65                  70                  75                  80
```

```
Leu Gln Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr Tyr Cys
                85                  90                  95

Ala Arg Gly Gly Tyr Gly Tyr Gly Phe Asp Tyr Trp Gly Gln Gly Thr
            100                 105                 110

Thr Val Thr Val Ser Ser
        115
```

<210> 72
<211> 117
<212> PRT
<213> Homo sapiens

<400> 72

```
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
  1               5                  10                  15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Ser Tyr
            20                  25                  30

Trp Ser Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
         35                  40                  45

Ile Gly Arg Ile Tyr Tyr Ser Gly Ser Thr Xaa Tyr Asn Pro Ser Leu
     50                  55                  60

Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65                  70                  75                  80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Glu Leu Pro Gly Gly Tyr Asp Val Trp Gly Gln Gly Thr Leu
            100                 105                 110

Val Thr Val Ser Ser
        115
```

<210> 73
<211> 123
<212> PRT
<213> Homo sapiens

<400> 73

```
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
  1               5                  10                  15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Ser Ser Gly
            20                  25                  30

Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
         35                  40                  45

Ile Gly Ser Met Phe His Ser Gly Ser Ser Tyr Tyr Asn Pro Ser Leu
     50                  55                  60
```

```
Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65                  70                  75                  80

Leu Gln Leu Arg Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Gly Arg Tyr Cys Ser Ser Thr Ser Cys Asn Trp Phe Asp Pro
            100                 105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115                 120
```

<210> 74
<211> 98
<212> PRT
<213> Homo sapiens

<400> 74

```
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
  1               5                  10                  15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Ser Ser Gly
            20                  25                  30
Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
        35                  40                  45

Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
     50                  55                  60

Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65                  70                  75                  80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg
```

<210> 75
<211> 117
<212> PRT
<213> Homo sapiens

<400> 75

```
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
  1               5                  10                  15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Thr Gly Gly
            20                  25                  30

Tyr Leu Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
        35                  40                  45

Met Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro Ser Leu
     50                  55                  60

Lys Asp Arg Ile Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Phe Ser
```

```
 65                  70                  75                  80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu
            100                 105                 110

Val Thr Val Ser Ser
        115


<210> 76
<211> 445
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (22)..(426)

<400> 76
gtcagaacgc gtgccgccac c atg aaa gtg ttg agt ctg ttg tac ctc ttg   51
                        Met Lys Val Leu Ser Leu Leu Tyr Leu Leu
                          1               5                  10

aca gcc att cct ggt atc ctg tct cag gtg cag ctt cag gag tcg ggc   99
Thr Ala Ile Pro Gly Ile Leu Ser Gln Val Gln Leu Gln Glu Ser Gly
                    15                  20                  25
cca gga ctg gtg aag cct tcg gag acc ctg tcc ctc acc tgc act gtc   147
Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val
                30                  35                  40

tct ggt tac tcc atc acc ggt ggt tat tta tgg aac tgg ata cgg cag   195
Ser Gly Tyr Ser Ile Thr Gly Gly Tyr Leu Trp Asn Trp Ile Arg Gln
            45                  50                  55

ccc cca ggg aag gga ctg gag tgg atg ggg tat atc agc tac gac ggt   243
Pro Pro Gly Lys Gly Leu Glu Trp Met Gly Tyr Ile Ser Tyr Asp Gly
        60                  65                  70
acc aat aac tac aaa ccc tcc ctc aag gat cga atc acc ata tca cgt   291
Thr Asn Asn Tyr Lys Pro Ser Leu Lys Asp Arg Ile Thr Ile Ser Arg
 75                  80                  85                  90

gac acg tcc aag aac cag ttc tcc ctg aag ctg agc tct gtg acc gct   339
Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala
                95                  100                 105

gcg gac act gca gtg tat tac tgt gcg aga tac ggt agg gtc ttc ttt   387
Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg Tyr Gly Arg Val Phe Phe
            110                 115                 120

gac tac tgg ggc cag gga acc ctg gtc acc gtc tcc tca ggtgagtgga   436
Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        125                 130

tcctctgcg                                                       445
```

<210> 77
<211> 135
<212> PRT
<213> Homo sapiens

<400> 77
Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
1 5 10 15

Leu Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro
20 25 30

Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Thr
35 40 45

Gly Gly Tyr Leu Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu
50 55 60

Glu Trp Met Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro
65 70 75 80

Ser Leu Lys Asp Arg Ile Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln
85 90 95

Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr
100 105 110

Tyr Cys Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly
115 120 125

Thr Leu Val Thr Val Ser Ser
130

<210> 78
<211> 445
<212> DNA
<213> Homo sapiens

<400> 78
cagtcttgcg cacggcggtg gtactttcac aactcagaca acatggagaa ctgtcggtaa 60
ggaccatagg acagagtcca cgtcgaagtc ctcagcccgg gtcctgacca cttcggaagc 120
ctctgggaca gggagtggac gtgacagaga ccaatgaggt agtggccacc aataaatacc 180
ttgacctatg ccgtcggggg tcccttccct gacctcacct accccatata gtcgatgctg 240
ccatggttat tgatgtttgg gagggagttc ctagcttagt ggtatagtgc actgtgcagg 300
ttcttggtca agagggactt cgactcgaga cactggcgac gcctgtgacg tcacataatg 360
acacgctcta tgccatccca gaagaaactg atgaccccgg tcccttggga ccagtggcag 420
aggagtccac tcacctagga gacgc 445

<210> 79
<211> 117
<212> PRT
<213> Homo sapiens

<400> 79
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

```
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Thr Gly Gly
            20                  25                  30

Tyr Leu Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
        35                  40                  45

Ile Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro Ser Leu
    50                  55                  60

Lys Asp Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Phe Ser
65                  70                  75                  80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu
            100                 105                 110

Val Thr Val Ser Ser
        115


<210> 80
<211> 445
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (22)..(426)

<400> 80
gtcagaacgc gtgccgccac c atg aaa gtg ttg agt ctg ttg tac ctc ttg   51
                        Met Lys Val Leu Ser Leu Leu Tyr Leu Leu
                          1               5                  10

aca gcc att cct ggt atc ctg tct cag gtg cag ctt cag gag tcg ggc   99
Thr Ala Ile Pro Gly Ile Leu Ser Gln Val Gln Leu Gln Glu Ser Gly
                15                  20                  25

cca gga ctg gtg aag cct tcg gag acc ctg tcc ctc acc tgc act gtc   147
Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val
            30                  35                  40

tct ggt tac tcc atc acc ggt ggt tat tta tgg aac tgg ata cgg cag   195
Ser Gly Tyr Ser Ile Thr Gly Gly Tyr Leu Trp Asn Trp Ile Arg Gln
        45                  50                  55

ccc cca ggg aag gga ctg gag tgg atc ggg tat atc agc tac gac ggt   243
Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Tyr Ile Ser Tyr Asp Gly
    60                  65                  70

acc aat aac tac aaa ccc tcc ctc aag gat cga gtc acc ata tca cgt   291
Thr Asn Asn Tyr Lys Pro Ser Leu Lys Asp Arg Val Thr Ile Ser Arg
75                  80                  85                  90

gac acg tcc aag aac cag ttc tcc ctg aag ctg agc tct gtg acc gct   339
Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala
                95                  100                 105
```

```
gcg gac act gca gtg tat tac tgt gcg aga tac ggt agg gtc ttc ttt   387
Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg Tyr Gly Arg Val Phe Phe
        110                 115                 120

gac tac tgg ggc cag gga acc ctg gtc acc gtc tcc tca ggtgagtgga    436
Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        125                 130

tcctctgcg                                                         445
```

<210> 81
<211> 135
<212> PRT
<213> Homo sapiens

<400> 81

```
Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
  1               5                  10                  15

Leu Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro
             20                  25                  30

Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Thr
         35                  40                  45

Gly Gly Tyr Leu Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu
     50                  55                  60

Glu Trp Ile Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro
 65                  70                  75                  80

Ser Leu Lys Asp Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln
                 85                  90                  95

Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr
            100                 105                 110

Tyr Cys Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly
        115                 120                 125
Thr Leu Val Thr Val Ser Ser
    130
```

<210> 82
<211> 445
<212> DNA
<213> Homo sapiens

<400> 82

```
cagtcttgcg cacggcggtg gtactttcac aactcagaca acatggagaa ctgtcggtaa 60
ggaccatagg acagagtcca cgtcgaagtc ctcagcccgg gtcctgacca cttcggaagc 120
ctctgggaca gggagtggac gtgacagaga ccaatgaggt agtcgccacc aataaatacc 180
ttgacctatg ccgtcggggg tcccttccct gacctcacct agcccatata gtcgatgctg 240
ccatggttat tgatgtttgg gagggagttc ctagctcagt ggtatagtgc actgtgcagg 300
ttcttggtca agagggactt cgactcgaga cactggcgac gcctgtgacg tcacataatg 360
acacgctcta tgccatccca gaagaaactg atgaccccgg tcccttggga ccagtggcag 420
aggagtccac tcacctagga gacgc                                       445
```

<210> 83
<211> 117
<212> PRT
<213> Homo sapiens

<400> 83
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Ser Gly Gly
20 25 30

Tyr Leu Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
35 40 45

Ile Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro Ser Leu
50 55 60

Lys Asp Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
65 70 75 80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr Val Ser Ser
115

<210> 84
<211> 445
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (22)..(426)

<400> 84
gtcagaacgc gtgccgccac c atg aaa gtg ttg agt ctg ttg tac ctc ttg 51
Met Lys Val Leu Ser Leu Leu Tyr Leu Leu
1 5 10

aca gcc att cct ggt atc ctg tct cag gtg cag ctt cag gag tcg ggc 99
Thr Ala Ile Pro Gly Ile Leu Ser Gln Val Gln Leu Gln Glu Ser Gly
15 20 25

cca gga ctg gtg aag cct tcg gag acc ctg tcc ctc acc tgc act gtc 147
Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val
30 35 40

tct ggt tac tcc atc agc ggt ggt tat tta tgg aac tgg ata cgg cag 195
Ser Gly Tyr Ser Ile Ser Gly Gly Tyr Leu Trp Asn Trp Ile Arg Gln 45
50 55

```
ccc cca ggg aag gga ctg gag tgg atc ggg tat atc agc tac gac ggt   243
Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Tyr Ile Ser Tyr Asp Gly
     60                  65                  70

acc aat aac tac aaa ccc tcc ctc aag gat cga gtc acc ata tca gtg   291
Thr Asn Asn Tyr Lys Pro Ser Leu Lys Asp Arg Val Thr Ile Ser Val
 75                  80                  85                  90

gac acg tcc aag aac cag ttc tcc ctg aag ctg agc tct gtg acc gct   339
Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala
                 95                 100                 105

gcg gac act gca gtg tat tac tgt gcg aga tac ggt agg gtc ttc ttt   387
Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg Tyr Gly Arg Val Phe Phe
            110                 115                 120

gac tac tgg ggc cag gga acc ctg gtc acc gtc tcc tca ggtgagtgga    436
Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        125                 130

tcctctgcg                                                         445


<210> 85
<211> 135
<212> PRT
<213> Homo sapiens

<400> 85
Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
  1               5                  10                  15

Leu Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro
             20                  25                  30

Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Ser
         35                  40                  45

Gly Gly Tyr Leu Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu
     50                  55                  60

Glu Trp Ile Gly Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Lys Pro
 65                  70                  75                  80

Ser Leu Lys Asp Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln
                 85                  90                  95

Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr
            100                 105                 110
Tyr Cys Ala Arg Tyr Gly Arg Val Phe Phe Asp Tyr Trp Gly Gln Gly
        115                 120                 125

Thr Leu Val Thr Val Ser Ser
    130


<210> 86
<211> 445
<212> DNA
```

<213> Homo sapiens

<400> 86
cagtcttgcg cacggcggtg gtactttcac aactcagaca acatggagaa ctgtcggtaa 60
ggaccatagg acagagtcca cgtcgaagtc ctcagcccgg gtcctgacca cttcggaagc 120
ctctgggaca gggagtggac gtgacagaga ccaatgaggt agtcgccacc aataaatacc 180
ttgacctatg ccgtcggggg tcccttccct gacctcacct agcccatata gtcgatgctg 240
ccatggttat tgatgtttgg gagggagttc ctagctcagt ggtatagtca cctgtgcagg 300
ttcttggtca agagggactt cgactcgaga cactggcgac gcctgtgacg tcacataatg 360
acacgctcta tgccatccca gaagaaactg atgaccccgg tcccttggga ccagtggcag 420
aggagtccac tcacctagga gacgc 445

<210> 87
<211> 18
<212> DNA
<213> Artificial sequence

<220>
<223> Description de la Artificial sequence:
Oligonucleotide

<400> 87
gtcagaacgc gtgccgcc 18

<210> 88
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 88
accatgaagt tgcctgttag gctgttggtg ct 32

<210> 89
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 89
gatgttctgg tttcctgctt ccagcagtga tg 32

<210> 90
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:

Oligonucleotide

<400> 90
ttgtgatgac tcagtctcca ctctccctgc cc 32

<210> 91
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 91
gtcacccctg gagagccggc ctccatctcc tg 32

<210> 92
<211> 32
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 92
caggtctagt cagaccatta tacatagtaa tg 32

<210> 93
<211> 30
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 93
gaaacaccta tttggaatgg tacctgcaga 30

<210> 94
<211> 32
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 94
ggcaacttca tggtggcggc acgcgttctg ac 32

<210> 95
<211> 32

<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 95
gaaaccagaa catcagcacc aacagcctaa ca 32

<210> 96
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 96
ctgagtcatc acaacatcac tgctggaagc ag 32

<210> 97
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 97
tctccagggg tgacgggcag ggagagtgga ga 32

<210> 98
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 98
tctgactaga cctgcaggag atggaggccg gc 32

<210> 99
<211> 31
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 99
aaataggtgt ttccattact atgtacaatg c 31

<210> 100
<211> 32
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<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 100
cagggcagtc tccacagctc ctgatctata aa 32

<210> 101
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<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 101
gtttctaatc ggctttatgg ggtccctgac ag 32

<210> 102
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 102
gttcagtggc agtggatcag gcacagattt ta 32

<210> 103
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 103
cactgaaaat cagcagagtg gaggctgagg at 32

<210> 104
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 104
gttggggttt attactgctt tcaaggttca ca 32

<210> 105
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 105
tgttccgtgg acgttcggcc aagggaccaa gg 32

<210> 106
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 106
tggaaatcaa acgtgagtgg atcctctgcg 30

<210> 107
<211> 17
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 107
tctgcaggta ccattgc 17

<210> 108
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 108
tgcaatggta cctgcagaag c 21

<210> 109
<211> 32
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<220>
<223> Description of artificial sequence:
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<400> 109
agactgccct ggcttctgca ggtaccattg ca 32

<210> 110
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 110
cgattagaaa ctttatagat caggagctgt gg 32

<210> 111
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 111
tgccactgaa cctgtcaggg accccataaa gc 32

<210> 112
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 112
gattttcagt gtaaaatctg tgcctgatcc ac 32

<210> 113
<211> 32
<212> DNA
<213> Artificial sequence

<220>

<223> Description of artificial sequence:
Oligonucleotide

<400> 113
taaaccccaa catcctcagc ctccactctg ct 32

<210> 114
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 114
tccacggaac atgtgaacct tgaaagcagt aa 32

<210> 115
<211> 31
<212> DNA
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 115
tttgatttcc accttggtcc cttggccgaa c 31

<210> 116
<211> 19
<212> DNA
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 116
cgcagaggat ccactcacg 19

<210> 117
<211> 18
<212> DNA
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 117
gtcagaacgc gtgccgcc 18

<210> 118
<211> 34
<212> DNA
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<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 118
accatgaaag tgttgagtct gttgtacctc ttga 34

<210> 119
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 119
cagccattcc tggtatcctg tctcaggtgc agct 34

<210> 120
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 120
tcaggagtcg ggcccaggac tggtgaagcc ttcg 34

<210> 121
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 121
gagaccctgt ccctcacctg cactgtctct ggt 33

<210> 122
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:

Oligonucleotide

<400> 122
tactccatca ccggtggtta tttatggaac tgg 33

<210> 123
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 123
atacggcagc ccccagggaa gggactggag tgg 33

<210> 124
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 124
atggggtata tcagctacga cggtaccaat aac 33

<210> 125
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 125
tcaacacttt catggtggcg gcacgcgttc tgac 34

<210> 126
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 126
ataccaggaa tggctgtcaa gaggtacaac agac 34

<210> 127

<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 127
tgggcccgac tcctgaagct gcacctgaga cagg 34

<210> 128
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 128
tgagggacag ggtctccgaa ggcttcacca gtcc 34

<210> 129
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 129
ccaccggtga tggagtaacc agagacagtg cagg 34

<210> 130
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 130
ccctgggggc tgccgtatcc agttccataa ataa 34

<210> 131
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 131
tagctgatat accccatcca ctccagtccc tt 32

<210> 132
<211> 16
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 132
gttattggta ccgtcg 16

<210> 133
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 133
tacgacggta ccaataacta c 21

<210> 134
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 134
aaaccctccc tcaaggatcg aatcaccata tc 32

<210> 135
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 135
acgtgacacg tccaagaacc agttctccct ga 32

<210> 136
<211> 32
<212> DNA

<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 136
agctgagctc tgtgaccgct gcggacactg ca 32

<210> 137
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 137
gtgtattact gtgcgagata cggtagggtc tt 32

<210> 138
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 138
ctttgactac tggggccagg gaaccctggt ca 32

<210> 139
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 139
ccgtctcctc aggtgagtgg atcctctgcg 30

<210> 140
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 140
agggagggtt tgtagttatt ggtaccgtcg ta 32

<210> 141
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 141
acgtgtcacg tgatatggtg attcgatcct tg 32

<210> 142
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 142
agagctcagc ttcagggaga actggttctt gg 32

<210> 143
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 143
cagtaataca ctgcagtgtc cgcagcggtc ac 32

<210> 144
<211> 32
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 144
agtagtcaaa gaagacccta ccgtatctcg ca 32

<210> 145
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 145
ctgaggagac ggtgaccagg gttccctggc ccc 33

<210> 146
<211> 18
<212> DNA
<213> Artificial sequence

<220>
<223> Description of artificial sequence:
Oligonucleotide

<400> 146
cgcagaggat ccactcac 18

<210> 147
<211> 31
<212> DNA
<213> Homo sapiens

<400> 147
ctggttactc catcagcggt ggttatttat g 31

<210> 148
<211> 31
<212> DNA
<213> Homo sapiens

<400> 148
cataaataac caccgctgat ggagtaacca g 31

<210> 149
<211> 31
<212> DNA
<213> Homo sapiens

<400> 149
gggactggag tggatcgggt atatcagcta c 31

<210> 150
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<212> DNA
<213> Homo sapiens

<400> 150
gtagctgata tacccgatcc actccagtcc c 31

<210> 151
<211> 31

<212> DNA
<213> Homo sapiens

<400> 151
tccctcaagg atcgagtcac catatcacgt g 31

<210> 152
<211> 31
<212> DNA
<213> Homo sapiens

<400> 152
cacgtgatat ggtgactcga tccttgaggg a 31

<210> 153
<211> 39
<212> DNA
<213> Homo sapiens

<400> 153
gatcgagtca ccatatcagt ggacacgtcc aagaaccag 39

<210> 154
<211> 39
<212> DNA
<213> Homo sapiens

<400> 154
ctggttcttg gacgtgtcca ctgatatggt gactcgatc 39

<210> 155
<211> 31
<212> DNA
<213> Homo sapiens

<400> 155
gcttccagca gtgatattgt gatgactcag t 31

<210> 156
<211> 31
<212> DNA
<213> Homo sapiens

<400> 156
actgagtcat cacaatatca ctgctggaag c 31